FTD-Π₆₅₋₁₁₉₃

166-60021

TRANSLATION

METHOD OF OBTAINING LUBRICANT FOR TITANIUM PARTS

Ву

N. K. Sul'zhenko, V. P. Barannik, et al.

FOREIGN TECHNOLOGY DIVISION

AIR FORCE SYSTEMS COMMAND

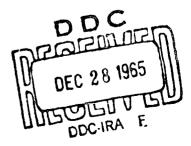
WRIGHT-PATTERSON AIR FORCE BASE OHIO

CLEARINGHOUSE
FOR FEDERAL SCHOOL AND
TECHNICAL IN

Hardcopy Microsom

\$ 1.00 \$ 0.50 \$...

Co-le 1





This translation was made to provide the users with the basic essentials of the original document in the shortest possible time. It has not been edited to refine or improve the grammatical accuracy, syntax or technical terminology.

METHOD OF OBTAINING LUBRICANT FOR TITANIUM PARTS by N. K. Sul'zhenko, V. P. Barannik, at al

A method is known for obtaining aluminum for titanium parts on the basis of crystalline iodine. However, such lubricants are not calculated to remain a long time in sea water, and therefore cannot prevent the seizing of fastened titanium joints.

It is proposed to obtain a lubricant for titanium parts by means of the interaction of cleic acid with crystalline iodine at a temperature of 85°C in the ratio of 1:1.

Example. To 100 parts by weight of cleic acid one adds 100 parts by weight of crystalline iodine. With constant stirring the mixture gradually is heated up to the full solution of the iodine but not higher than 85°C, so as not to allow the escaping of its fumes. Afterwards the product obtained is cooled to room temperature (about 20°C) and separated from the precipitant if any is formed (which can happen if one uses insufficiently pure original products).

The lubricant prepared represents an adhesive mass with a viscosity of 182.7 cst at 50°C, not soluble in water with specific gravity of 1.47.

For obtaining greater viscosity and improving the moisture resistance, into the iodized oleic acid one may put various thickening components on the basis of higher alcohols, aldehydes, ketones of high molecular weight, etc.

Object of the Invention

A method of obtaining a lubricant for titanium parts on the basis of crystalline iodide which has the distinguishing feature that for the purpose of preventing the seizing of fastened titanium parts and improving anticorrosion capacity, the oleic acid is subjected to interaction with crystalline iodine at a temperature of 85° in the ratio of 1:1.